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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,368	04/22/2004	Daniel Gelbart	91506/MGB	7069
1333 7590 09/21/2007 EASTMAN KODAK COMPANY PATENT LEGAL STAFF 343 STATE STREET ROCHESTER, NY 14650-2201			EXAMINER MUI, CHRISTINE T	
			ART UNIT 1743	PAPER NUMBER
			MAIL DATE 09/21/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/829,368

Applicant(s)

GELBART, DANIEL

Examiner

Christine T. Mui

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 22 April 2004; 05 October 2005.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "5" has been used to designate both lens and shroud and comparator. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: embodiments 7 in Figure 2 and 15, 16, 21 and 22 in Figure 3. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any

amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:
4. On page 1, line 7, in the instance where it reads "No other applications relate" probably should read "No other applications relate."
5. On page 4, lines 19 and 24, in the instances where it reads "um" probably should read " μm "
6. On page 5, line 6, in the instance where it reads "um" probably should read " μm "
7. On page 5, line 13, in the instance where it reads "few pars per million" probably should read "few parts per million"
8. On page 5, line 22, in the instance where it reads "and Filter 13" probably should read "and filter 13"

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9. On page 6, lines 2 and 3 in the instances where it reads "um" probably should read "μm"

10. On page 6, line 26, in the instance where it reads "Ma,)." probably should read ""Ma.).".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 3-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 583 709 to Naccache et al (submitted on the Information Disclosure Statement on 22 April 2004; herein referred "Naccache").

13. Regarding claim 1, the reference Naccache discloses an identification device reader and a method of identification of memory cards. Naccache discloses a plastic support of a card (item) containing randomly distributed ferrite particles (tagging). The random distribution of the particles is impossible to control or influence during the process. The ferrite particles are mixed with the plastic paste from which the plastic support of the card is to be produced. It is interpreted by the examiner that since the ferrite particles are mixed with the plastic paste, it is invisible to an unaided human eye. The issuing authority scans the card with a magnetic inductance detector (optically

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detecting and in proximity of item) and reads the emplacement of the ferrite particles as a number p , then computes $s = \text{SIG}(\text{ID}, p)$ (generating data). When the card is inserted into the reader that scans the card, it reads the distribution characteristics as a number p . The ID and s are then retrieved from the memory means and the reader checks that the s is the valid signature of $\{\text{ID}, p\}$ (verifying) (see abstract, column 1, lines 28-32).

14. Regarding claim 3, the reference Naccache discloses a respective reader that is provided with the magnetic inductance detectors that reads the distribution of particles as a number p and with a chip reader for reading the card's memory means (registration feature) (see column 1, lines 38-41).

15. Regarding claim 4, the reference Naccache discloses that the device includes memory means and an area in which the elements have a random distribution which is represented by a value p and can be detected and evaluated in the reader means whereby at least identity data ID and data s of a public key signature scheme (invariant to exact placement) are stored in the memory means (see column 2, lines 3-12).

16. Regarding claim 5, the reference Naccache discloses that when the card is inserted into a verification reader, the reader will scan it and convert the random distribution of particles into a number p . Next, it reads s and ID from the card's memory means and will check that s is the actual signature of $\{\text{ID}, p\}$ (see column 2, lines 54-58 and column 3, lines 1-2). It is interpreted by the examiner that during the scans the reader is able to endure possible errors that will eventually be verified by the memory means.

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17. Regarding claim 7, the reference Naccache discloses the memory card that is processed such that small metal or ferrite particles are mixed with the plastic paste from which the plastic support of the card is to be produced. A respective reader is provided with magnetic inductance detectors that reads the distribution of particles as a number p and with a chip reader for reading the card's memory means. Once the number value p is determined, the verification reader will read the s and ID from the card's memory means and will check that s is actually the signature of $\{ID, p\}$ by performing a SIG-1 calculation (see column 1, lines 28-31, 38-41, 56-58 and column 2, lines 1-2).

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

20. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naccache as applied to claim 1 above, and further in view of Kaplan et al (submitted on the Information Disclosure Statement on 05 October 2005; herein referred "Kaplan").

21. Regarding claim 2, the reference Naccache discloses the claimed invention except where the item is printed with a liquid that is made up of printing ink and taggant. Kaplan discloses that the most cost effective way to deposit taggants onto an item is by utilizing a process that is used in the manufacture of any pharmaceutical packaging or labeling that is printing. The markers are mixed with commercial inks or varnish. Due to the special properties of the markers, the standard ink acting as a carrier, remains unaffected as the coded ink is visually identical to the unmarked one and maintains original performance characteristics (see page 2, left column, paragraph 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to mix in the taggant with a printing ink that is applied to an item in order to appear visually identical to printing ink alone so that in verification, only the issuing or checking authority will be able to determine the difference between tagged and non-tagged items, such as cards or pills.

22. Claims 6 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naccache.

23. Regarding claim 6, the reference Naccache discloses that the issuing authority of the memory cards record the s and ID in the memory means of the card (see column 1, line 48). Naccache does not disclose that in the verifying step, part of the data is detected in RAM. It would have been obvious to one having ordinary skill in the art at the time to save the s and ID information in a random access memory instead of an unspecified memory means.

24. Regarding claim 8, the reference Naccache discloses a card with a different random distribution pattern of particles on each card. A reader is provided with magnetic inductance detectors that reads the distribution of particles as a number p and with a chip reader for reading the card's memory means. The verification reader reads the s and ID from the memory means and check that s is actually the signature of $\{ID, p\}$ (see column 1, lines 33-41, 57-58 and column 2, lines 1-2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the mixture of the ferrite particles and the plastic paste used in only part of the card then subjected to the reader and mark the item rather than store the p value with the reader memory. As part of the verification process, since the ID of the card is stored, it would be obvious to compare the newly read and calculated value of s to ensure the authenticity of the card.

25. Regarding claim 9, the reference Naccache discloses that the card with ferrite particles in the support are subjected to a respective reader that allows the reader to read the distribution (forming an image) of particles (means of making the taggant detectable) with a chip reader (imaging processing) for reading the card's memory

means of the particles (registration mark). The verification (registering the taggant) reader will read s and ID from the a card's memory means and will check that s is the actual signature of the card (see column 1, lines 30-32, 38-42, 57-58 and column 2, lines 1-2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a camera, rather than a reader that captures an image of the card, in the case of the distribution of the ferrite particles.

26. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naccache, and further in view of USP 5,719,939 to Tel (submitted on the Information Disclosure Statement on 22 April 2004; herein referred "Tel").

27. Regarding claim 9, the reference Naccache discloses the claimed invention except for providing an electronic camera capable of forming an image. Tel discloses a system for verify the legitimacy of a product against forgery where a scanning means in the form of a high-resolution camera that scans the unique pattern (taggant distribution) on the card or item. In addition, the pattern that is scanned has at least one additional identifying mark may be scanned such as a photograph of the owner. A converting means (image processing) is provided so that covert is provided to the output (e.g. pixel data) (making taggant detectable to camera), of the scanning means into a suitable form for processing the data in data compressing means. The original data is converted (registering) into a reduced quantity of equivalent data by processing the data in predetermined algorithms. The data is stored in the permanent memory and can be used for comparing of the system when a new scan is performed (see column 3, lines

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25-46). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a high resolution camera to capture an image as well as an additional image, such as a picture, of the item of interest for security purposes as opposed to a reader that just scans a distribution of particles to decrease the possibility of forgery and duplication of the item.

Conclusion

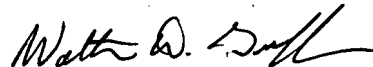
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine T. Mui whose telephone number is (571) 270-3243. The examiner can normally be reached on Monday-Friday 8-5; Alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on (571) 272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CTM



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